REMARKS

A review of the claims indicates that:

A)   Claims 2-17, 19-35, 37, 39 and 40 remain in their original form.

B)   Claims 1, 18, 36, 38 are currently amended.

In view of the following remarks, Applicant respectfully requests reconsideration of the rejected claims and withdrawal of the rejections.

Claim Amendments

The Applicant has made a number of claim amendments. These amendments are not a reflection of an opinion of the allowability of any claim, or of the content, disclosure and/or teaching of the prior art of record. Instead, the claim amendments reflect a desire on the part of the Applicant to move the prosecution of this application forward, to reduce the expense and time of the pending period, and to thereby expedite prosecution. The Applicant retains the right to file claims having the same or similar scope at a future date.

Claim Objections

Claim 38 was objected to for having a typographical error. This error is now corrected.

Claims 18-34 and 38-40 were objected to for having omitted the word "initial". The Applicant has added the word initial to independent Claim 18 at the third line and to independent Claim 28 at the third line. The Applicant believes that these amendments resolve that issue, but would welcome the chance to discuss the amendment, if the Examiner feels outstanding issues remain.

35 U.S.C. §112

Claim 36 was rejected under Section 112 as lacking antecedent basis. This error has been corrected.

35 U.S.C. §101 Rejections

Claims 17, 34, 37 and 40 were rejected under Section 101 as being directed to non-statutory subject matter. The Applicant has amended paragraphs [0055] and [0060] in the specification, and believes that this rejection is now overcome.

35 U.S.C. §102 Rejections

Claims 1, 3-6, 10-12, 17, 18, 20-23, 27-29 and 34 were rejected under §102(e) as being anticipated by U.S. Patent Application No. 2002/0184310, hereinafter "Traversat." In response, the Applicant respectfully traverses the Office's rejections.

Claim 1 recites a method comprising:
- transmitting a query with a computing device in a domain;
- receiving, with the computing device, a response to the query from one or more neighbor-casting (NC) groups in the domain each including one or more said computing devices;
- applying, with the computing device, a predetermined criteria to select one said NC group;
- joining the computing device to the selected NC group;
- **when a length of time between a subsequent query from the computing device and other computing devices in the selected NC group exceeds a predetermined threshold:**
  - **removing the computing device from the initial NC group; and**
  - **joining the computing device to a different NC group.**

Claim 1 has been amended to recite "when a length of time between a subsequent query from the computing device and other computing devices in the selected NC group exceeds a predetermined threshold" then removing the

computing device from the initial group and joining it to a different group. This amendment essentially tracks the original Claim 35, wherein the last paragraph says "when a length of time between the query and each said group response exceeds a predetermined threshold, removing the initial computing device from the initial NC group".

Because of the amendments to Claim 1, the Applicant will address aspects of the rejection of Claim 35, respectfully submitting that Claim 1 is allowable over the theory by which Claim 35 was rejected. The Patent Office rejected Claim 35 under the Section 103 argument, citing non-obviousness over Traversat in view of the O'Hare US 7,302,256 reference. Accordingly, the Applicant will address Traversat and O'Hare in showing that Claim 1 is allowable.

The Office points to Traversat as teaching that computing devices may be configured to join and leave groups. Additionally, the Office points to O'Hare as teaching that a threshold period of time can be measured after sending a broadcast in an environment wherein electronic/computing devices are configured into groups. The Applicant respectfully submits that even combined, Traversat and O'Hare fail to teach or suggest removing a computing device from a group based on latency times within the group.

While Claim 35 was rejected by pointing to the rejections of Claims 1, 2 and 18, the Applicant submits that Claim 35 recites elements not recited by original Claims 1, 2 and 18. In particular, Claim 35 recited that the length of time between query and response between group members *was a reason to remove* a computing device from a group. This element was not recited by Claims 1, 2 and 18, but has been added to Claim 1, as amended.

Thus, the Applicant submits that Traversat and O'Hare, singly and jointly, do not teach or suggest (1) recognizing the latency (time between query and response) *between group members*, and (2) removing a computing device from the group *if the latency is too great*. Traversat fails to teach or suggest latency as a reason (i.e. part of the criteria) for removing devices from a group, and O'Hare fails to actually measure latency *between devices in a group*, since O'Hare teaches that the threshold is applied following "discovery requests" which appear to be related to recruiting new devices to join the group, not devices in the group. Accordingly, the Applicant submits that Claim 1, as amended, recites such elements and is allowable over Traversat and O'Hare.

Turning to Traversat, at [0380], the joining and leaving of peer groups is taught. In particular, Traversat teaches that devices have "rights and responsibilities" and that there are "group membership requirements". However, Traversat does not teach or suggest recognizing latency and removing a device from a group. Similarly, at [0466] Traversat teaches joining and leaving, but does not teach or suggest the recited language, concerning latency as a reason for leaving a group. <u>Accordingly, the Applicant respectfully submits that Traversat fails to teach or suggest any criterion by which a device can be removed from a group, and certainly does not suggest that latency is such a reason for device removal</u>.

Referring to O'Hare at Fig. 3A and the cited passages in columns 10 and 11, O'Hare teaches that a threshold can be used between transmissions of "discovery requests" (block 102 of Fig. 3A) and while waiting for a "join response" (block 110 of Fig. 3A). <u>The Applicant respectfully submits that what</u>

O'Hare teaches is not a measure of latency (query to response time) among devices within the group. Instead, O'Hare teaches sending "discovery requests" which appear to be directed to devices not yet in the group. Thus, O'Hare does not teach or suggest applying a threshold to measure latency between devices *within the group that would be useful in knowing if a device should be removed from the group*. Moreover, O'Hare does not suggest the utility of such a step.

Thus, Traversat fails to teach that latency is part of a criteria for removing a device from the group, and O'Hare fails to teach a measure of latency in communication between two computing devices *in the group*.

Therefore, the Applicant respectfully submits that Traversat and O'Hare fail to teach and or suggest aspects of Claim 1, as amended, and therefore to not render the claim obvious. Accordingly, the Applicant respectfully requests that Claim 1, as amended, be allowed to issue.

Claims 2-17 depend from Claim 1 and are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 1, are not shown and not disclosed in references of record, either singly or in combination with one another.

Claim 18 recites a method comprising:
- transmitting a query with an initial computing device in a domain, wherein the initial computing device is in an initial NC group that contains a number of said computing devices that are also in the domain;
- receiving, with the initial computing device, a response to the query from one or more NC groups in the domain each including one or more computing devices;

- **if a latency in response times between the initial computing device and other computing devices within the initial NC group is unacceptable**, then:
  - applying, with the computing device, predetermined criteria to select one of the one or more NC groups;
  - **removing** the initial computing device from the initial NC group; and
  - **joining** the initial computing device to the selected NC group, **wherein computing devices within the selected NC group have a latency in response time with the initial computing device that is acceptable.**

Claim 18 has been amended to recite, "if a latency in response times between the initial computing device and other computing devices within the initial NC group is unacceptable" then removing the initial computing device from the NC group. Once removed, the computing device is joined to a different NC group, wherein "computing devices within the selected NC group have a latency in response time with the initial computing device that is acceptable". Thus, Claim 18 has been amended in a manner similar to original Claim 35, which recited aspects of a length of time between query and response leading to removing a device from a group. "Acceptable" latency periods are discussed in the Applicant's specification at paragraphs [0018], [0021] and [0022], and other locations. In particular, at [0022], "unacceptable latency" is tied directly to the need to leave one group and join a different group.

Because Claim 18 has been amended in a manner similar to Claim 1, the Applicant incorporates the remarks from above with respect to Claim 1 at this location.

Therefore, the Applicant respectfully submits that Traversat and O'Hare fail to teach and or suggest aspects of Claim 18, as amended, and therefore to not

render the claim obvious. Accordingly, the Applicant respectfully requests that Claim 18, as amended, be allowed to issue.

Claims 19-34 depend from Claim 18 and are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 18, are not shown and not disclosed in references of record, either singly or in combination with one another.

The §103 Rejections

Claims 2, 7-9, 13-16, 19, 24-26, 30-33 and 35-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Traversat in view of the O'Hare US 7,302,256 reference. In response, the Applicant respectfully traverses the rejection.

Claim 35 recites a method comprising:
- transmitting a query with an initial computing device in a domain, wherein the computing device is in an initial NC group that contains a number of said computing devices in the domain;
- receiving with the initial computing device a group response to the query from one or more related said computing device that are in the initial NC group; and
- **when a length of time between the query and each said group response exceeds a predetermined threshold, removing the initial computing device from the initial NC group.**

Claim 35 is in original and un-amended condition, and retains its original scope.

Claim 35 recites, "when a length of time between the query and each said group response exceeds a predetermined threshold, removing the initial computing device from the initial NC group". As will be seen below, the Applicant

respectfully submits that O'Hare fails to teach "a length of time between the query and *each said group response*" as recited. Instead, O'Hare teaches a threshold period used to communicate with devices *not yet in the group*, which are sent "discovery requests" and from which are desired a "join request" (see O'Hare at blocks 102 and 108).

In making out the rejection of Claim 35, the Patent Office pointed to the rejection of Claims 1, 2 and 18. <u>Accordingly, the Applicant incorporates by reference the remarks from above, with respect to Claims 1 and 18</u>. Additionally, the Applicant provides additional remarks below, and respectfully argues that Claim 35 recites elements not taught or suggested by Traversat and/or O'Hare.

In particular, the rejection of Claim 35 was by reference to the rejections of Claims 1, 2 and 18. However, the Applicant notes that Claim 2 recited "from the group consisting of" language. In contrast, Claim 35 does not recite this broadening language. Thus, the Applicant respectfully submits that the rejection of Claim 35 must be more finely detailed than the rejection of Claim 2. In particular, the Applicant submits that Traversat and O'Hare are deficient to support the rejection.

In particular, Traversat, at [0380], teaches that a "protocol" allows a peer to join or leave a group, and that membership is based on "membership requirements". However, there is no suggestion that Traversat teaches within the "protocol" to remove a peer from a group based on latency in messages to/from other group members. O'Hare also fails to teach or suggest removing a device from a group based on latency between query and response, and therefore fails to remedy the failure of Traversat.

Referring to O'Hare at Fig. 3A and columns 10—12, the Applicant respectfully submits that O'Hare fails to teach "a length of time between the query and each said group response" as recited. Instead, O'Hare teaches a threshold period used to communicate with devices not yet in the group, which are sent "discovery requests" and from which are desired a "join request" (see O'Hare at blocks 102 and 108). Moreover, nothing in O'Hare suggests that the threshold could be applied to query/response between group members, as recited by the claim.

Accordingly, the Applicant respectfully submits that Traversat and O'Hare fail to teach or suggest the elements of Claim 35. In particular, Traversat fails to teach removal of a device for latency issues, and O'Hare fails to teach application of a threshold to actual group members.

Therefore, the Applicant respectfully submits that Traversat and O'Hare fail to teach and or suggest aspects of Claim 35, as amended, and therefore to not render the claim obvious. Accordingly, the Applicant respectfully requests that Claim 35, as amended, be allowed to issue.

Claims 36-37 depend from Claim 35 and are allowable as depending from an allowable base claim, as well as for their recitation of elements not seen in the prior art of record. These claims are also allowable for their own recited features that, in combination with those recited in Claim 35, are neither taught nor suggested in references of record, either singly or in combination with one another.

Claim 38 recites a method comprising:

- …; and
- **updating software on computing devices in the selected NC group, wherein the updating comprises deploying software, uninstalling software and providing security patches to installed software, and wherein the software updating includes setting the predetermined criteria to locate computing devices within the selected NC group according to backup needs of computing devices within the NC group.**

Claim 38 recites much of the same subject matter that is recited by Claims 1, 18 and 35, and is allowable for at least the same reasons. Accordingly, the Applicant incorporates the remarks from above at this location.

Additionally, Claim 38 recites aspects of "updating software". This subject matter is seen at paragraph [0026] and other locations. The Applicant respectfully submits that this aspect is not taught or suggested by the Traversat and/or O'Hare references.

Claims 39-40 depend from Claim 38 and are allowable as depending from an allowable base claim, as well as for their recitation of elements not seen in the prior art of record. These claims are also allowable for their own recited features that, in combination with those recited in Claim 38, are neither taught nor suggested in references of record, either singly or in combination with one another.

Conclusion

The Applicant submits that all of the claims are in condition for allowance and respectfully requests that a Notice of Allowability be issued. If the Office's next anticipated action is not the issuance of a Notice of Allowability, the Applicant respectfully requests that the undersigned attorney be contacted for the purpose of scheduling an interview.

Respectfully Submitted,

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